REMARKS

Claims 1-4 and 7-12 are currently pending in the application. By this amendment, no claims are amended or added for the Examiner's consideration, however, the specification is amended to correct minor grammatical errors. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

35 U.S.C. §102 Rejection

Claims 1-4 and 7-12 were rejected under 35 U.S.C. §102(e) for being anticipated by U.S. Patent No. 7,133,365 issued to Klinker, *et al.* ("Klinker"). This rejection is respectfully traversed.

In accordance with the guidelines set forth in MPEP 2131:

> A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants submit that the reference applied by the Examiner does not show each and every feature of the claimed invention.

Claims 1, 9, and 10

Claim 1 recites, in pertinent part:

> ... determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router...

Claim 9 recites, in pertinent part:

> ... means for determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router...

Claim 10 recites, in pertinent part:

> ... third program instructions to determine whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router...

The Examiner asserts that Klinker includes the feature of determining whether or not transmission of a datagram on a link to the next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with the next hop router. Applicants submit, thought, that Klinker includes a flow control system, which determines whether a data traffic flow meets one or more rules associated with a flow policy. (Col. 7, line 65 – Col. 8, line 5.) The rules define acceptable routing behavior associated with a traffic flow, for example, by defining the maximum bandwidth usage associated with a specific provider, the range of acceptable service providers, etc. (Col. 8, lines 7-21.)

The flow control system includes a usage collector, which is configured to monitor usage characteristics such as the load and available capacity of each network service provider (NSP). (Col. 10, lines 18-28.) The usage collector is comprised of a raw collector, utilization monitor, and bill reconstructor. (Fig. 12.) The raw collector sends a query to collect interface raw byte counters from routers on each of the provider circuits at a specified sampling interval. (Col. 20, lines 33-36.) This raw byte information is sent to the utilization monitor, which calculates the ingress and egress circuit utilization for each provider and determines whether bandwidth is increasing or decreasing in size for a given service provider. (Col. 20, lines 42-51.) The bill reconstructor then uses the raw byte counters and the provider's billable rates for the current billing period to generate an estimated bill, which is sent to a controller for use in peak avoidance and least cost routing. (Col. 20, lines 52-66.) In addition to using the estimated bill for peak avoidance and least cost routing, the controller may also use the

billing information to determine whether a route has free bandwidth, i.e., the route does not incur additional cost to use. (Col. 21, lines 6-10.) If a route has no free bandwidth and/or exceeds a flow policy, then traffic flow may be changed to a better performing path. (Col. 8, line 63 – Col. 9, line 4; Col. 26, lines 53-60.)

However, Applicants respectfully submit that Klinker does not include the feature of determining whether or not transmission of a datagram on a link to the next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with the next hop router. More specifically, Klinker determines whether bandwidth will be exceeded by estimating a bill based on a collection of raw byte counters taken during a specified sampling interval. (See Fig. 17.) If the estimated bill results in no additional cost then the route has free bandwidth. Therefore, Klinker determines whether the raw byte counters measured during a specified sampling interval will result in a bandwidth usage exceeding a bandwidth threshold. However, Klinker does not determine whether or not transmission of a datagram, which may be spaced over multiple sampling intervals or a fraction of a sampling interval, would result in a bandwidth usage exceeding a bandwidth threshold.

Furthermore, Klinker is configured to calculate usage information from network providers (i.e., the amount of traffic transmitted to and received from NSPs.) (Col. 20, lines 14-17.) Therefore, Klinker estimates whether an entire NSP's bandwidth has been exceeded, regardless of whether individual routers within the NSP have exceeded their bandwidth policy. For example, if a NSP includes three routers, and one router greatly exceeds a bandwidth threshold while the other two routers are below a bandwidth threshold, then the NSP as a whole may still be below the bandwidth policy threshold. Hence, Klinker determines whether bandwidth usage exceeds a bandwidth threshold associated with a network service provider. Klinker does not determine whether bandwidth usage exceeds a bandwidth threshold associated with a router.

Accordingly, Applicants respectfully request that the rejection over claims 1, 9, and 10 be withdrawn.

Dependent Claims

Claims 2-4, 7-8, and 11-12 are dependent claims, depending on independent claims 1, 9, and 10. For this reason, Applicant submits that these claims are thus distinguishable based on independent claims 1, 9, and 10. Applicants further submit that these claims also include subject matter which is distinguishable from Klinker.

Claim 2

Claim 2 recites, in pertinent part:

> ...updating the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold...

Applicants submit that Klinker does not update a bandwidth threshold associated with the chosen next hop router with a larger predefined bandwidth threshold. Klinker determines whether a route has free bandwidth before using the route. If the route does not have free bandwidth then an alternative route is determined based in part on a route's free bandwidth and the cost associated with the routing. (Col. 21, lines1-10.) In other words, if a specific route between NSPs is not available then Klinker will keep looking for another low cost route that meets existing flow policies. Klinker does not update the bandwidth threshold associated with the next hop router with a larger predefined bandwidth threshold. Accordingly, Applicants respectfully submit that claim 2 is not anticipated.

Claim 3

Claim 3 recites, in pertinent part:

> ... adding a bandwidth usage associated with said next hop router immediately before transmission of said datagram on said link to said next hop router to a bandwidth usage required for transmission of said datagram on said link to said next hop router...

The Examiner asserts that Klinker adds bandwidth usage, associated with the next hop router immediately before transmitting the datagram on a link to the next hop router, to the bandwidth usage required for transmitting the datagram on the link to the next hop router. However, Applicants respectfully submit that the passage cited by the Examiner does not include this feature. More specifically, the passage merely lists details of what may be included in the NSP configuration information. (Col. 20, lines 21-31.) This configuration information includes data representing utilization trends for use with short range forecasting models, e.g., to determine whether bandwidth is trending up or down. (Col. 20, lines 46-51.) However, Klinker does not include adding bandwidth usage associated with the next hop router immediately before transmitting the datagram on a link to the next hop router. Accordingly, Applicants respectfully submit that claim 2 is not anticipated. Accordingly, claim 3 is not anticipated.

Claim 4

Claim 4 recites, in pertinent part:

> ... wherein the step of updating the bandwidth usage associated with the first said next hop router, comprises the step of updating in a table, the current bandwidth usage with the estimated bandwidth usage.

The Examiner asserts that Klinker updates in a table the current bandwidth usage with the estimated bandwidth usage. However, Applicants assert that the passage cited by the Examiner does not include any indication that a table is used, much less updated. (Col. 20, lines 13-20.) Furthermore, while Klinker includes a routing table, that table is used to update routes, or paths, that meet minimum service levels (e.g., no violations of SLA, or no unacceptable deviations from agreed upon performance metrics as defined by the associated flow policy). (Col. 21, lines 25-29.) The routing table is not used to update current bandwidth usage with the estimated bandwidth usage. Accordingly, claim 4 is not anticipated.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 09-0457.

Respectfully submitted,

Andrew M. Calderon
Registration No. 38,093

Greenblum & Bernstein, P.L.C.
1950 Roland Clarke Place
Reston, Virginia 20191
Telephone: 703-716-1191
Facsimile: 703-716-1180